Ostial Corporation

510(k) Notification: Flash-C PTCA Balloon Dilatation Catheter

K113775 P. 10F2

JUN 2 9 2012

## SECTION 5: 510(k) SUMMARY

A. Submitter Information

Submitter's Name: Ostial Corporation

Address: 510 Clyde Avenue

Mountain View, CA 94043

Telephone: 650-903-9100 Fax: 650-903-9119

Email: <u>kvonhoffmann@ostialcorp.com</u>

Contact Person: Kaitlin von Hoffmann
Date of Preparation: December 19, 2011

B. Subject Device

Trade Name: Flash-C PTCA Balloon Dilatation Catheter

Common/Usual Name: PTCA Catheter

Classification Name: Catheters, Transluminal Coronary Angioplasty.

Percutaneous

Product Code: LOX per 21 C.F.R. 870.5100

## C. Device Description:

The Flash-C PTCA Balloon Dilatation Catheter is indicated for balloon dilatation of the stenotic portion of a coronary artery or bypass graft for the purpose of improving myocardial perfusion. The Flash-C PTCA Balloon Dilatation Catheter is a 0.014" guidewire-compatible, rapid exchange (RX) angioplasty balloon catheter with proximal anchoring. The device uses a dual balloon design featuring a compliant anchoring balloon, which enables the operator to precisely position the catheter at aorto-ostial anatomies and prevent distal migration of the balloon during angioplasty. The second semi-compliant high pressure balloon allows for luminal dilatation.

#### D. Intended Use:

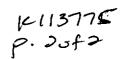
The Flash-C PTCA Balloon Dilatation Catheter is indicated for balloon dilatation of the stenotic portion of a coronary artery or bypass graft for the purpose of improving myocardial perfusion.

# E. Summary of Similarities and Differences in Technological Characteristics, Performance and Intended Use:

The Flash-C PTCA Balloon Dilatation Catheter that is the subject of this 510(k) is an extension of a product line of the same name, which was cleared via 510(k) #K111284 on August 19, 2011. Minor design and process changes to decrease the crossing profile of the device have been implemented. This submission includes devices with balloon diameters ranging from 4.0 to 6.0mm and balloon lengths of 14 to 19mm. The new sizes are 135cm in length and compatible with 6 French guide catheters.

#### F. Performance Data:

Biocompatibility testing was completed and submitted as part of the Flash PTA 510(k) #K102482. The Flash-C PTCA Balloon Dilatation Catheter (#K111284) is identical in design, materials, and manufacturing to the Ostial Corporation's Flash PTA Balloon Dilatation Catheter, cleared by the FDA in 510(k) #K102482 on February 25, 2011. Since no changes have been



implemented which would affect the biocompatibility of the device, these results are applicable to the subject device.

Requirements for biological evaluation of the device were based on ISO-10993, "Biological Evaluation of Medical Devices, Part 1: Evaluation and Testing." The biocompatibility test results show that the materials used in the design and manufacture of the components of the device are non-toxic and non-sensitizing to biological tissues consistent with its intended use. The following biocompatibility tests were completed:

- ISO MEM Elution Assay
- ASTM Hemolysis Assay
- Complement Activation C3a and SC5b-9 Assay
- Thromboresistance Evaluation
- Pyrogen (LAL) Chromogenic

- Materials Mediated Pyrogen
- ISO Guinea Pig Maximization Sensitization
- ISO Acute Systemic Toxicity
- ISO Intracutaneous Reactivity

The Flash device was evaluated using the following in-vitro performance bench testing to confirm the performance characteristics:

- Balloon Crossing Profile
- Catheter Shaft Diameter
- Balloon Rated Burst Pressure (Angioplasty)
- Balloon Burst Volume (Anchoring)
- Angioplasty Balloon Compliance
- Balloon Inflation Time
- Balloon Deflation Time

- Angioplasty Balloon Fatigue
- Anchoring Balloon Fatigue
- Catheter Bond Strength
- Catheter Tip Pull Strength
- Catheter Torque Strength
- Simulated Use/Flexibility/Kink

In-vivo testing was completed on the previously cleared Flash device using a swine model. A simulated angioplasty procedure was performed on test and control groups (the control group used the Sterling PTA Balloon Dilatation Catheter). Post procedure animals were survived and observed for a predetermined period to assess for downstream and cognitive effects.

All test results demonstrate that the materials, manufacturing process, and design of the Flash-C PTCA Balloon Dilatation Catheter meet the established specifications necessary for consistent performance according to its intended use.

#### G. Conclusions:

The Flash-C PTCA Balloon Dilatation Catheter is indicated for balloon dilatation of the stenotic portion of a coronary artery or bypass graft for the purpose of improving myocardial perfusion. The purpose of this 510(k) is to request clearance for an extension of the Flash-C PTCA Balloon Dilatation Catheter product line, which was initially cleared via 510(k) K111284 on August 19, 2011. All test results demonstrate that the Flash-C PTCA Balloon Dilatation Catheter meets all predetermined design verification and validation acceptance criteria.





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room -- WO66-G609 Silver Spring, MD 20993-0002

JUN 2 9 2012

Ostial Corp. c/o Ms. Kaitlin von Hoffmann Clinical and Regulatory Associate 510 Clyde Avenue Mountain View, CA 94043

Re: K113775

Trade/Device Name: Flash-C PTCA Balloon Dilatation Catheter

Regulation Number: 21 CFR 870.5100

Regulation Name: Catheters, Transluminal Coronary Angioplasty, Percutaneous

Regulatory Class: Class II

Product Code: LOX Dated: June 1, 2012 Received: June 4, 2012

## Dear Ms. von Hoffmann:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

# Page 2 – Ms. Kaitlin von Hoffman

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Gram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

M & Willelm

Center for Devices and Radiological Health

Enclosure

Ostial Corporation

510(k) Notification: Flash-C PTCA Balloon Dilatation Catheter

#### **SECTION 4: INDICATIONS FOR USE STATEMENT**

510(k) Number:

K113775

Device Name:

Flash-C PTCA Balloon Dilatation Catheter

Indication For Use:

The Flash-C PTCA Balloon Dilatation Catheter is indicated for balloon dilatation of the stenotic portion of a coronary artery or bypass graft for

the purpose of improving myocardial perfusion.

Prescription Use X (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)

Division of Cardiovascular Devices

510(k) Number KII 3775